limiting to a minimum the length of the time during which a colony is occupied, the percentage loss of offspring will also be minimal. Close synchronization of breeding activities, being a means of reducing the period of occupation of a colony, may thus be regarded as a form of passive defence against specialized nest predators, although this is probably not its only function.

References:

Hinde, R. A. 1961 in *Biology and Comparative Physiology of Birds*. Vol. II, ed. A. J. Marshall. Academic Press.

Pitman, C. R. S. 1958. *Bull. B.O.C.* 78: 5, 6, 7.

Pitman, C. R. S. 1962. *Ibid.* 82: 2, 3.

## On some races of *Motacilla flava* Linn. found in Indonesia

*by* A. HOOGERWERF

*Received 16th July, 1962*

The difficulties encountered when classifying representatives of this wagtail are already pointed out by other authors. Voous[1] tried to solve part of the problems; he classified the greater part of the material present in the Bogor Museum which I used when studying my freshly collected birds from Princes Island and those from the Karimundjawa and Kangean Archipelagos. Study of this material induced me to publish these notes.

When comparing the series before me with the particulars published by Voous, the results differ on several points. There are for instance two females obtained in January, named by him as adult *simillima* which have the under parts much darker yellow than two females classified by the same author as adult *taivana* (obtained in September and October), though following Voous' own paper, the opposite should be the case in birds in the winter plumage.

An adult bird (shot in October) classified after some hesitation as *tschutschensis* by the same author is indeed "duller yellow" on the under surface, when compared with both January skins, indicated above as *simillima*, but certainly not duller than a third specimen classified as *simillima* ad. ♂ by the same author, which was secured in October in Central Java and also not duller than still another male in winter plumage from Krakatau Island (Strait Sunda): both these birds show also dark brownish markings on the chest. This *tschutschensis* was labelled by Gerlof Mees, who secured the skin near Bogor (West Java), as ♀ ?, but Voous made the remark on the label "looks like a ♂". However, in his publication he calls this same bird a male without any further comment. This is in my opinion not justified, particularly in this case where it concerns a subspecies which shows sexual dimorphism and which was never before secured on Java.

As the most important reason which induced Voous to consider this bird and a second juvenile male obtained at the same date and in the same locality, not identical with *taivana* or *simillima*, he mentions the darker upper parts. But when comparing fresh skins of *taivana* or *simillima* with material stored for a considerable time in a museum, the necessity to use material obtained at about the same time is very evident. I had occasion to ascertain this as an undisputable fact after comparing my freshly collected skins with those secured many years ago in exactly the same localities and in the same months.

Both these birds considered as *tschutschensis* were shot in 1948 and studied certainly not later than two years after their death and they were the only fresh skins Voous could study in the Bogor Museum. When we mix these skins with the fresh ones, recently obtained by me from the localities mentioned above it proves quite impossible to separate them on their darker upper surface. But the adult bird is a trifle greener on those parts and the juvenile a distinct light grey, probably not characters which make *tschutschensis* separable from both other races discussed above, because such differences were not mentioned in Voous' paper.

That all my fresh skins of this wagtail should belong to this (for Java) new subspecies is unbelievable and is certainly not so. Voous himself classified a juvenile male and female originating from Karimundjawa (secured there in November 1930) as *taivana* and I am of the opinion that my freshly obtained October/November birds from that same group of islands also belong to this race, though they are strikingly darker above than the skins obtained there 25 years earlier.

Three adult females collected by me on Princes Island, Karimundjawa and Kangean fully agree in the feathering of the under parts with two females named by Voous as *taivana*, which were shot in the same months (September and October) on Krakatau and Billiton Islands. But the dark markings on the chest are more obvious in those fresh skins than is the case in both these *taivana* and this—after Voous—should form an indication in the direction of *simillima*. However, in accordance with the same author, this last race always has the head greyer than the mantle and back which, indeed, is so with the adult *simillima* of both sexes before me, though not always in the same striking way. In the three adult females indicated above, the pileum and the remaining upper parts are exactly the same colour and two of them have a little green on the lower back. They have also very distinct white eye-stripes.

On account of the great similarity in the tint of the under parts, together with the uniform colour of the upper surface when compared with the skins considered by Voous as *taivana* which were obtained in the same months, I think it fully justified to consider those fresh skins as *taivana*. In this subspecies I also included two juveniles obtained from Princes Island and Karimundjawa which also agree with old material of this race, partly from this last group of islands, excepting again the darker upper parts.

In view of the above there seems little reason to consider both Bogor skins, classified by Voous as *tschutschensis* Gm (=*alascensis*)—one specimen of uncertain sex—to belong to this race. In my opinion they are *taivana;* they have the Bogor Museum nos 18.851 and 18.852.

One female from Karimundjawa has a rather dark pileum and seems also a trifle darker on the ear-coverts than the other birds seen by me, which makes it rather similar to *macronyx*. But it has a distinct eye-stripe and the upper parts do not differ from fresh *taivana* which induced me to classify this skin, too, as belonging to this last subspecies; it is no. 24.347 of the Bogor Museum.

The individual size differences in birds of this species are not large but females seem to average a trifle smaller than males.

In 1959 the same author published a second paper[2] dealing with the races of the Yellow Wagtail wintering in Borneo. Among the 44 adult specimens within a series of 54 skins present in the Sarawak Museum he

classified 34 skins as *taivana* (=77%), nine as *simillima* (=20%) and again one as *tschutschensis*. He also draws attention to a possible hybrid of *simillima* x *taivana*.

I think Mayr[3] was right when giving as his opinion that in this case only an analysis of breeding populations can lead to reliable results and that conclusions based on a study of specimens on migration or in their winter quarters may be misleading in such a difficult species complex as *Motacilla flava*.

References:

[1] Voous, K. H. The races of Yellow Wagtail (*Motacilla flava*) wintering in the Indo Australian Archipelago; *Treubia* 20, 1949–1950, p. 647–656.
[2] Voous, K. H. A new note on the races of the Yellow Wagtail (*Motacilla flava*) wintering in Borneo; *The Sarawak Museum Journal*, 9, 1959, p. 13–14.
[3] Mayr, Ernst. The interpretation of variation among the Yellow Wagtails; *British Birds*, 49, 1956, p. 115–119.

## Some Pochard x Lesser Scaup hybrids

*by* Bryan L. Sage

*Received 12th December, 1962*

The hybrids discussed in this paper are of particular interest in that they are the only known specimens of this interspecific cross, and apparently not previously described.

Annie P. Gray (*Bird Hybrids* 1958) mentions only one instance of this cross having been obtained and that refers to the birds dealt with here. At least five of these hybrids were bred in captivity in 1928 by Lord Lilford, at Lilford Hall, Northamptonshire, England. The male parent was a European Pochard, *Aythya ferina* (L) and the female a Lesser Scaup, *Aythya affinis* (Eyton). The specimens that I have had available for study consist of an adult male and female in full plumage from the same brood. They were formerly in Lord Walter Rothschild's collection at Tring Museum, but are now with the Rothschild collection at the American Museum of Natural History, Registered Nos. 734547 and 734549 respectively. The geographical distribution of these species is such that natural hybrids are not to be expected.

### DESCRIPTION OF SPECIMENS

Male.

*Head and neck*—dark chestnut, darker and browner than in male Pochard; blackish-brown feathers are present on the posterior part of the crown and on the nape, and from the throat down the foreneck; there is a small white chin spot.

*Upper parts*—upper mantle dark greyish-brown with some blackish-brown feathers present at the sides and across the base of the neck; remainder of mantle, back and scapulars dark greyish on a brown ground colour, darker than in male Pochard, and finely vermiculated with greyish-white; rump and upper tail-coverts dark blackish-brown.

*Wings*—outer primaries dark brownish-grey; inner primaries and secondaries pale grey; wing-coverts mouse brown; under wing white.

*Under parts*—breast blackish-brown, the feathers of the central and lower breast with broad whitish tips; remainder of under parts pure